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Supplemental Material

Feasibility of Deploying Inhaler Sensors to Identify the Impacts of Environmental Triggers and Built Environment Factors on Asthma Short-Acting Bronchodilator Use

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transferred into ratios by dividing them by the number of daily active participants. Temporal variations of rescue inhaler use events generally followed temporal trends of PM_{10} .

Figure S2: A time series plot of daily number of rescue inhaler use events overlaid with daily O_3 concentrations. O_3 was standardized by its IQR and daily rescue inhaler use events were transferred into ratios by dividing them by the number of daily active participants. The relationship was more complicated than that of PM₁₀, with associations only being high in summer of 2012.

Figure S3: A time series plot of daily number of rescue inhaler use events overlaid with daily temperature. Temperature was standardized by its IQR and daily rescue inhaler use events were transferred into ratios by dividing it by number of daily active participants. The two generally followed a similar pattern in year 2012 and the associations decreased in year 2013 during a cooler summer.

Figure S4: The scatter plot of temperature vs. rescue inhaler use events. Temperature was standardized by its IQR and daily rescue inhaler use events were transferred into ratios by dividing it by number of daily active participants. The figure indicates that temperature and rescue inhaler use events had a polynomial relationship.